

FURTHER NOTES ON HELICOID LAND SHELLS FROM JAPAN,
THE LOO-CHOO, AND BONIN ISLANDS, WITH DESCRIPTIONS
OF SEVEN NEW SPECIES.

By G. K. GUDE, F.Z.S., etc.

Read 9th March, 1900.

PLATE VIII.

SINCE reporting on two collections from Japan and the Loo-Choo Islands, the writer has received from the same source several additional species, seven of which appear to be undescribed. In addition, one species from Bonin has come to hand. The occurrence in Japan of the genus *Chloritis*, to which I refer two shells of an undescribed species, is of very great interest; and I may mention in this connection that, in looking over the Lewis Collection of Japanese shells in the British Museum, I found it to contain two unnamed specimens belonging to an allied species of this genus.

Furthermore, the discovery of the genera *Ganesella*, *Macrochlamys*, and *Arnouldia* in the Loo-Choo Islands appears to me to be noteworthy.

The following is an enumeration of the species :—

JAPAN.

1. ARNOULDIA PHYLLOPHILA, Reinh. Two specimens. Kashima, province Harima. Hitherto only recorded from Mososeki.

2. ARNOULDIA STENOGYRA, A. Ad. Six specimens. Kashima, province Harima. Hitherto only recorded from Tsu-shima.

3. ARNOULDIA ACUTANGULA, A. Ad. Six specimens. Kyoto. Not previously recorded from this locality.

4. CHLORITIS (TRICHOCHLORITIS) FRAGILIS, n.sp.

Pl. VIII, Figs. 18–20.

Shell perforate, depressed, fuscous-corneous. Spire flat, apex sunken, suture deep. Whorls $4\frac{1}{2}$, convex, increasing slowly at first, then rather suddenly, densely covered with short stiff hairs arranged in oblique rows. The last whorl not descending in front, inflated; below, descending rather suddenly into the narrowly perforated umbilicus. Aperture slightly oblique, rounded-lunate; peristome thin, straight; the margins convergent, united by a thin callus on the parietal wall; columellar margin slightly reflected and partly covering the deep narrow umbilicus. Diam. maj. 15.5, min. 13 mm.; alt. 11 mm.

Hab.—Kyoto.

Type in my collection. Two specimens.

This new species, which belongs to the group of *Chloritis brevidens*, Pfr., differs from all known species by its thin, fragile, semi-transparent texture. It extends the known range of this genus to the northward and westward, Southern China being the most northern and the Philippine Islands the most western previously recorded habitats.

5. *GANESELLA MYOMPHALA*, Martens. Hirado, province Hizen. Ten specimens. A very fine large form.

Diam. maj. 43, min. 37 mm.; alt. 32 mm.

Tanabe, province Kii. Ten specimens.

Diam. maj. 36, min. 31 mm.; alt. 25 mm.

Iznihara, Tsn-shima. Ten specimens.

Diam. maj. 36, min. 32 mm.; alt. 28 mm.

Var. *fusca*, var. nov. More solid and much darker than the type. Lip blackish brown.

Kokubu, province Hida. Two specimens.

Diam. maj. 37, min. 34 mm.; alt. 31 mm.

„ „ 39, „ 36 „ „ 37 „

Var. *minor*.

Fukura, Awaji Island. One specimen.

Diam. maj. 25, min. 22.5 mm.; alt. 18.5 mm.

6. *GANESELLA TABUENSIS*, Anc. = *patruelis*, A. Ad.

Kaminoho, province Mino. One specimen.

Diam. maj. 20, min. 19 mm.; alt. 17 mm.

7. *GANESELLA SPHINCTOSTOMA*, A. Ad. The form figured by Kobelt, Fauna Moll. extram. Jap., t. 2, f. 11.

Ibuku Mountain, province Omi. Two specimens.

Diam. maj. 20, min. 18 mm.; alt. 15 mm.

„ „ 18, „ 16 „ „ 14 „

8. *GANESELLA HILGENDORFI*, Kob.

Ibuku Mountain, province Omi. Two specimens.

Diam. maj. 12, min. 10.75 mm.; alt. 8 mm.

„ „ 12.5, „ 11 „ „ 9 „

9. *GANESELLA EUMENES*, West. Ten specimens. Hirado, province Hizen. Hitherto only recorded from Mizu, Kiu-siu.

Diam. maj. 13.5, min. 11 mm.; alt. 9.25 mm.

„ „ 12, „ 10.5 „ „ 8.5 „

10. *EULOTA* (s.s.) *SIEBOLDIANA*, Pfr., var. *MINOR*. Kioto. Two specimens.

Diam. maj. 11, min. 10 mm.; alt. 10.5 mm.

„ „ 10.5, „ 9 „ „ 9 „

11. *EULOTA* (*PLECTOTROPIS*) *ÆMULA*, n.sp. Pl. VIII, Figs. 9-11.

Shell widely umbilicated, trochoid, rather thin, dark corneous-brown. Spire elevated, suture impressed, apex prominent, acute. Whorls 6, increasing slowly, a little rounded above, tumid below, angulated round the wide umbilicus, transversely striated, decussated with

microscopic spiral lines above and below under a thin cuticle, and covered with transverse rows of interrupted scales. Last whorl shortly descending in front, with an acute compressed keel at the periphery, the keel covered with a deciduous fringe of moderate scales. Aperture oblique, sub-diagonal; peristome thin, acute, margins approaching, the upper straight, the outer and lower a little expanded. Umbilicus wide and deep. Diam. maj. 12-14.5, min. 10.5-13 mm.; alt. 6.5-8 mm.

Hab.—Takeya, province Idzumo.

Type in my collection. Ten specimens.

The nearest ally is *Eulota* (*Plectotropis*) *trochula*, A. Ad., from which the new species differs in being smaller and thinner, as well as in its much wider umbilicus and more acute apex; further, the peristome is less thickened and reflected, its margins more convergent, and the peripheral fringe shorter and more deciduous.

12. *EULOTA* (*PLECTOTROPIS*) *HORRIDA*, Pilsbry. Pl. VIII, Figs. 6-8.

Shell widely umbilicated, flattened, discoidal, thin, dark corneous. Spire depressed, apex obtuse, suture rather shallow. Whorls 5-5½, slowly widening, flattened above, tumid below; striated transversely, and decussated by microscopic spiral lines under a thin cuticle, which is raised into thin transverse lamellæ; these lamellæ are produced into long fimbriæ, rather short and dispersed above, but longer and densely covering the shell below, where they are arranged in more or less regular horizontal rows. Last whorl descending slowly and shortly in front, carinated above the periphery, a little constricted behind the peristome. Aperture oblique, subcircular; peristome thin, acute, scarcely thickened; the margins approaching, the upper straight, the outer and lower a little expanded, columellar margin slightly reflexed over the wide and deep umbilicus. Diam. maj. 13.5, min. 12 mm.; alt. 6 mm.

Hab.—Saigo, province Uzen.

Two specimens.

The nearest ally appears to be the Chinese *Eulota* (*Plectotropis*) *trichotropis*. *E. horrida* differs from it, however, in the much more depressed spire, in the greater inflation of the whorls below, as well as in the coarse, stiff, closely set fimbriæ of the lower surface. The latter character, indeed, separates the present from every other known species of the genus.

[Since the above description was written, I find Mr. Pilsbry has published this species (by a strange coincidence, under the same name as proposed by me) in the *Nautilus*, May, 1900, xiv, p. 11.]

13. *EULOTA* (*EULADRA*) *SENCKENBERGIANA*, Kob. Kokubu, province Hida. Two specimens. Typical forms of this beautiful and rare species; they do not quite reach the dimensions of Kobelt's types.

Diam. maj. 49, min. 43 mm.; alt. 33 mm.

Shinano. Two specimens. One is much decorticated.

Diam. maj. 54, min. 47 mm.; alt. 33 mm.

The second specimen is more depressed than the other.

Diam. maj. 54.5, min. 46 mm.; alt. 29 mm.

14. *EULOTA* (*EUHADRA*) *LUHUANA*, Sby.

- A. Straw-yellow with a blackish-brown third band and umbilical patch (fifth band), suffused with light-brown near the mouth. Three specimens have the third and fourth bands coalesced, of a pale-brown. Lip fuscous.

Geifuku, Iki-shima. Five specimens.

Diam. maj. 40, min. 34 mm.; alt. 27 mm.

„ „ 37, „ 32.5 „ „ 28 „

- B. Pale to dark-corneous. One specimen has a faint interrupted second band; two others have the second band continuous, dark-brown. The remaining two have the first band diffused, pale-brown; the second band narrow, dark-brown; the third and fourth coalesced of a dark-brown, becoming diffused farther back; all have the dark umbilical patch. Lip fuscous.

Kamomura, province Shima. Five specimens.

Diam. maj. 34, min. 29 mm.; alt. 22 mm.

„ „ 32, „ 27 „ „ 18 „

- C. Dark chestnut, becoming blackish towards the mouth; it has a narrow second band and umbilical patch black; lip dark fuscous.

Kamomura, province Shima. One specimen.

Diam. maj. 32, min. 27 mm.; alt. 22 mm.

- D. Var. *Herklotsi*, Mts.

1. From blackish chestnut to chocolate in colour; lip livid chocolate to pale fuscous. Band formulas: 12(34)5, 12(3-4)5, 12305, 02005, 02(34)5.

Izuhara, Tsu-shima. Eight specimens.

Diam. maj. 41, min. 34 mm.; alt. 26 mm.

„ „ 37, „ 31 „ „ 23 „

„ „ 35.5, „ 30 „ „ 25 „

2. From corneous to dark brown; band formulas as in preceding.

Tashiro, province Owari. Seven specimens.

Diam. maj. 37, min. 31 mm.; alt. 21 mm.

„ „ 31, „ 26 „ „ 20 „

- E. Var. *coa*, Crosse. Apparently a rare form.

Yoshinaga, province Suruga. One specimen. Lip rosy.

Diam. maj. 39, min. 33 mm.; alt. 20 mm.

Kasanishi, province Totomi. Two specimens. One is a little more elevated in the spire, and has a white lip; in the other the lip is rosy.

Diam. maj. 42.5, min. 35.5 mm.; alt. 24.5 mm.

„ „ 42, „ 35 „ „ 22.5 „

Mikusiga, province Suruga. One specimen.

15. *EULOTA* (*EUHADRA*) *PELIOMPHALA*, Pfr.

- A. Pale straw-colour; allied to typical *E. peliomphala*, but larger and more depressed.

Omikado, province Inaba. Six specimens.

1. Three specimens, bandless.

Diam. maj. 42, min. 36.5 mm.; alt. 25 mm.

„ „ 39, „ 32.5 „ „ 22 „

2. Three specimens with second and fifth band dark brown.

Diam. maj. 42, min. 36 mm.; alt. 26.5 mm.

„ „ 40, „ 34 „ „ 24.5 „

B. Var. *Brandti*, Kob.

Yamakura, province Shimosa. One specimen.

Diam. maj. 28.5, min. 24 mm.; alt. 19 mm.

C. Var. *Nipponensis*. Kobelt.

Kobe, province Setsu. Six specimens.

Transversely streaked alternately with brown, pale corneous, and straw yellow. Differs from typical *Nipponensis* in having a dark umbilical patch and a dark-brown, narrow or broad, second band, which in one specimen, however, is almost obliterated.

Diam. maj. 34, min. 28.5 mm.; alt. 22 mm.

„ „ 32.5, „ 26.5 „ „ 19 „

„ „ 29, „ 25 „ „ 19 „

16. *EULOTA* (*EUHADRA*) *BLAKEI*, Kob. = *E. Blakeana*, Gude, *non* Newc., ante, p. 16, pl. ii, figs. 18-20. Yadenobe, province Oshima, Island Yezo. Thirty specimens. The banded and bandless forms are in about equal proportions; one specimen has only a single supra-peripheral band. This form was erroneously referred by me to *E. Blakeana*. Mr. Pilsbry informs me that Newcomb's species, the type of which has been examined by him, is quite distinct. He thinks Kobelt's name for the present species should stand, since the variation in spelling is sufficiently different and involves a different meaning.

17. *EULOTA* (*EUHADRA*) *SERICEA*, n.sp. Pl. VIII, Figs. 12-14.

Shell umbilicated, depressed, discoid; finely ribbed and decussated with incised spiral lines; unicolorous grey corneous, thin, pellucid, with a silky gloss; spire low conoid, apex obtuse, suture impressed. Whorls 6, increasing regularly, a little convex above, inflated below; the last bluntly angulated above the periphery, suddenly widened at the mouth, not descending in front. Aperture oblique, roundly lunate; peristome scarcely thickened, acute, expanded; margins converging, united by a thin callus on the parietal wall; columellar margin slightly reflected over the moderately wide, deep, perspective umbilicus, which allows all the whorls to be seen distinctly. Diam. maj. 30-29, min. 25-24.5 mm.; alt. 16-15.5 mm.

Hab.—Teshio.

Type in my collection. Two specimens.

The nearest ally is *E. Blakei*. The Lewis Collection of the British Museum contains two unnamed shells, which I refer to this species. The width of the umbilicus appears to be somewhat variable.

18. *EULOTA* (*EUHADRA*) *SCEVOLA*, Mts. Tadate, province Shinano. One specimen. A blackish-brown form, with a narrow dark peripheral band, bordered above and below with a narrow lighter zone. Diam. maj. 32, min. 27.5 mm.; alt. 18 mm.

Kokubu, province Hida. Two specimens. Chestnut brown. Diam. maj. 33.5, min. 29 mm.; alt. 19 mm.

19. *VALLONIA TENERA*, Reinh. Osaka. Five specimens.

LOO-CHOO ISLANDS.

20. *MACROCHLAMYS FULGENS*, n.sp. Pl. VIII, Figs. 24-26.

Shell perforate, trochoid, thin, shining, pellucid, dark corneous. Spire depressed, apex obtuse, suture linear, margined. Whorls 4, increasing rather suddenly; the last twice as wide as the penultimate, convex, a little inflated; finely striated, decussated by microscopic spiral lines. Last whorl not descending, slightly excavated in the umbilical region. Aperture slightly oblique, lunate; peristome thin, straight, acute; margins distant, sub-parallel, the columellar margin a little reflected and nearly covering the very narrow umbilical perforation. Diam. maj. 7, min. 6 mm.; alt. 4.5 mm.

Hab.—Loo-Choo Islands.

Type in my collection. Ten specimens.

This *Macrochlamys* is, I believe, the first recorded from the Loo-Choo group.

21. *ARNOULDIA NAHAËNSIS*, n.sp. Pl. VIII, Figs. 21-23.

Shell imperforate, trochoid, thin, pellucid, pale corneous. Spire elevated, apex obtuse, suture impressed. Whorls $5\frac{1}{2}$, widening very slowly, convex, with a thread-like compressed keel at the periphery. Last whorl scarcely wider than the penultimate, not descending in front, excavated in the umbilical region. Aperture a little oblique, lunate; peristome thin, acute, straight, margins distant, columellar margin a little reflected. Diam. 3, alt. 2.5 mm.

Hab.—Naha.

Type in my collection. Ten specimens.

This genus, like the preceding, has not, to my knowledge, been hitherto found in the Loo-Choo Islands. Possibly many more species of both genera remain to be discovered. The present *Arnouldia* appears to be allied to *A. pustulina*, Reinh., a Japanese shell.

22. *GANESELLA TURRITA*, n.sp. Pl. VIII, Figs. 1 and 2.

Shell dextral, perforate, elongate-conoid, thin, sub-pellucid, pale corneous, very finely obliquely striated, under a strong lens seen to be decussated with microscopic wrinkled spiral lines. Spire elevated; apex minute, exserted; suture slightly impressed. Whorls 9, increasing slowly, the first four a little rounded, the remaining flattened above, a little swollen below, carinated at the periphery; the last not descending in front, the base swollen round the umbilicus, a little flattened below the peripheral keel. Aperture oblique, semi-ovate; peristome thin, acute, a little reflected; the margins converging,

upper straight, lower curved, forming an obtuse angle with the columellar margin, which is reflected and half covering the narrow umbilicus. Diam. 5.5-5.75, alt. 9-11 mm.

Hab.—Loo-Choo Islands.

Messrs. Sowerby and Fulton have sent me two shells of an undescribed species which they had received from Mr. Hirase. I provisionally place it in *Ganesella*, although, when the soft parts come to be examined, it may prove to belong to *Buliminopsis*. The new shell differs from all other forms of *Ganesella* in its turreted shape. No species of *Ganesella* has hitherto been recorded from this group of islands, but its occurrence from a geographical point of view is not surprising. The type-specimen is deposited in the British Museum, the other specimen is in my collection. [Since drawing up the above diagnosis, I have received from Mr. Hirase ten additional specimens.]

23. *EULOTA* (s.s.) *DESPECTA*, Gray. Shafte. Ten specimens. Dark brown, more solid, more coarsely ribbed, larger and darker than the form previously recorded (ante, p. 16).

Diam. maj. 27, min. 23 mm.; alt. 26.5 mm.

„ „ 25, „ 22.5 „ „ 24 „

„ „ 24, „ 21.5 „ „ 23.5 „

Kikai, Osumi Island. Six specimens. A small solid form, of a rosy tint; mouth and peristome rosy violet.

Diam. maj. 20, min. 17.75 mm.; alt. 18 mm.

„ „ 18, „ 15.25 „ „ 15.75 „

24. *EULOTA* (*PLECTOTROPIS*) *LEPIDOPHORA*, n.sp. Pl. VIII, Figs. 3-5.

Shell depressed, trochoid, rather solid, dull ochreous-corneous. Spire elevated, suture shallow, apex obtuse. Whorls 5-5½, slowly increasing, flattened above, rounded below, transversely striated below the cuticle, which is raised into dense transverse rows of elevated triangular scales above and below. Embryonic whorls smooth. Last whorl descending very shortly in front, carinated at the periphery, the carina provided with a fringe of triangular scales. Aperture oblique, subrotundate-lunate; peristome a little thickened and expanded all round; margins approaching, columellar margin a little reflexed over the umbilicus, which is deep and moderately wide. Diam. maj. 7.5-10, min. 6.5-9 mm.; alt. 3.75-5.5 mm.

Hab.—Loo-Choo Islands.

Type in my collection. Ten specimens.

Var. *tenuis*, n.var. Differs from the type in being much thinner and paler; the triangular scales are also much more sparse. Twenty specimens.

25. *EULOTA* (*PLECTOTROPIS*) *SCASPASMA*, Pfr. Pl. VIII, Figs. 15-17.

Shell conoid, solid, pale ochreous. Spire elevated, suture impressed, apex prominent. Whorls 7, increasing slowly, rounded above, tumid below, transversely striated, the lower surface spirally wrinkled; the deciduous cuticle densely covered with minute triangular scales. Embryonic whorls smooth. Last whorl descending very slowly

for a short distance in front, bluntly keeled, without fringe at the periphery. Aperture oblique, securiform; peristome strongly thickened and shortly expanded, fuscous; margins distant, united by a well-defined thick callus on the parietal wall; columellar margin sub-vertical, forming an angle with the basal margin, reflected a little over the umbilicus, which is deep and rather narrow, showing the penultimate whorl. Diam. maj. 18, min. 17 mm.; alt. 12.5 mm.

Hab.—Loo-Choo Islands.

Two specimens were kindly sent me by Mr. J. H. Ponsonby, who informs me he received them from Mr. Robert Cairns. Mr. Fulton drew my attention to the resemblance between these shells and *Helix seepasma*, described by Pfeiffer in 1854, of unknown habitat. Upon comparing them with the type-specimen of that species in the British Museum this identification proved to be correct, and it is a source of satisfaction to be able to fix the habitat of a species which had for so many years eluded the searches of naturalists. The type shell being much worn and decorticated, the published figures in Reeve's "Conchologia Iconica" and Tryon's "Manual of Conchology" are not very satisfactory, and I have therefore thought it advisable to give an illustration of one of these two specimens, which are in beautiful condition. *E. seepasma* is allied to the preceding species, but differs in being much larger and more solid, while the triangular scales covering the cuticle are much smaller and more crowded, and the peripheral fringe is absent. The second specimen is a trifle smaller than the one figured, measuring: diam. maj. 17, min. 16 mm.; alt. 12 mm.

26. *EULOTA* (*ÆGISTA*) *OCULUS*, Pfr. Precise habitat not indicated. Hitherto only recorded from Ty-pin-san, in the Nambu-Shoto (Madjicosima) group. Chocolate brown, with a whitish peripheral band and rosy peristome. One specimen is pale yellowish-brown.

Diam. maj. 25, min. 21.5 mm.; alt. 13.75 mm.

" " 19.25, " 17 " " 10.75 "

27. *EULOTA* (*EUHADRA*) *CONNIVENS*, Pfr. Kikaiga-shima, Osumi. Four specimens. A more compressed form than the type, with rounded periphery and blackish-brown peripheral band. Peristome much thickened. One specimen is of a russet brown with rosy peristome. This form somewhat resembles a miniature *E. miranda*.

Diam. maj. 22, min. 19.5 mm.; alt. 14 mm.

" " 20.5, " 18 " " 12.75 "

Two specimens. Pearly white, with a narrow light-brown band.

Diam. maj. 15.5, min. 13.5 mm.; alt. 10 mm.

" " 16.5, " 14 " " 10 "

28. *EULOTA* (*EUHADRA*) *LARGILLIERTI*, Phil. Shaffe. Thirty specimens. Some bandless, some with one dark-brown peripheral band. One specimen has a pale greenish-yellow band.

Diam. maj. 27.5, min. 24 mm.; alt. 24.5 mm.

" " 26, " 22.5 " " 22.5 "

" " 24.5, " 21 " " 21 "

29. *EULOTA* (*EUHADRA*) *MERCATORIA*, Gray. Two specimens. Blackish brown, with a light zone on each side of the peripheral band.

Diam. maj. 41, min. 36.5 mm.; alt. 30 mm.

Two specimens. A small form of a light brown, with a narrow blackish-brown band. One has a dark umbilical patch, the other only a faint indication of it.

Diam. maj. 28, min. 24 mm.; alt. 18 mm.

„ „ 26.5, „ 23 „ „ 17 „

30. *EULOTA* (*EUHADRA*) *YAEYAMENSIS*, Pils. Two specimens. Pale brown, rather thin, with a faint brown peripheral band.

Diam. maj. 26.5, min. 22 mm.; alt. 15 mm.

BONIN ISLANDS.

(OGASAWARA.)

31. *EULOTA* (*MANDARINA*) *MANDARINA*, Gray. Bonin Islands (precise island not indicated). Two specimens. One shell has a broad dark supra-peripheral band reaching to the suture, a narrow dark peripheral band bordered above and below by a pale zone, and broad dark-brown band below; the umbilical region is pale rose. The second shell has the upper broad dark band, but no peripheral band; and the lower band is much interrupted and ill-defined.

Diam. maj. 23, min. 20.5 mm.; alt. 18.5 mm.

Six specimens. Blackish, with a rosy zone round the umbilicus. Traces of a black peripheral band, bordered in places by a paler zone above and below, are noticeable.

Diam. maj. 22.5, min. 19 mm.; alt. 18 mm.

„ „ 19, „ 17.5 „ „ 18 „

„ „ 20.5, „ 17.25 „ „ 16 „

ADDENDA.

Since publishing my first article on Japanese and Loo-Choo shells, Mr. Pilsbry has sent me a reprint of a paper published by him in the Proceedings of the Academy of Natural Sciences, Philadelphia, for 1899, which I had not seen when going to press. As two of the species described by me as new are published in Mr. Pilsbry's article, which was issued February 12th, 1900, my names become synonyms. They are: *Eulota* (*Plectotropis*) *Hirasci* (ante, p. 10, pl. ii, figs. 4-7), which becomes *Eulota caricollis*, Pils. (loc. cit., p. 527, pl. xxi, figs. 11-13). Mr. Pilsbry makes this species the type of a new subgenus, *Colorus*: *Eulota* (*Ægista*) *Awajiensis* (ante, p. 11, pl. ii, figs. 8-10) becomes *Eulota* (*Ægista*) *aperta*, Pils. (loc. cit., p. 527, pl. xxi, figs. 7-9). Toyonishikami, province Nagato.

In the same article (p. 526) Mr. Pilsbry changes *Eulota lata*, Gld., to *E. Gainesi*, on account of *Helix lata*, Pfr., an earlier name than

that of Gould. As Pfeiffer's shell, however, is probably one of the Zonitidæ, certainly not a *Eulota*, I am unable to see the necessity of this alteration.

ADDITIONS TO THE CLASSIFIED LIST OF HELICOID LAND SHELLS.

JAPAN.

CHLORITIS.

fragilis, Gude. Kioto.

GANESELLA.

myomphala, Mts.

var. *fusca*, Gude.

Kokubu, province Hida.

var. *minor*, Gude. Fukura, Awaji Island.

satsuma, Pils. Kioto.

ferruginea, Pils. Okayama, province Bizen.

heteroglypta, Pils. Fukura, Awaji Island.

Jacobi, Pils.

TRISHOPLITA.

? *mesogonia*, Pils. Province Tonga.

EULOTA.

rudis, Pils. Omi.

(Plectotropis.)

horrida, Pils. Saigo, province Uzen.

æmula, Gude. Takeya, province Idzumo.

(Ægista.)

aperta, Pils.

= *Awajiensis*, Gude. Toyonishikami, province Nagato; Fukura, Awaji Island.

(Cælorus, Pils.)

cavicolis, Pils.

= *Hirasei*, Gude. Kioto.

(Euhadra.)

Luhwana, var. *Herklotsi*, Mts. Izuhara, Tsushima; Tashiro, province Owari.

Simodæ, Jay. Simoda.

luna, Pils. Yurdamisawa, province Ishikari.

Blakei, Kob.

= *Blakeana*, Gude, non Newc. Yatonobe, province Oshima.

sericea, Gude. Teshio.

LOO-CHOO.

MACROCHLAMYS.

fulgens, Gude.

ARNOULDIA.

Nahaensis, Gude. Naha.

GANESSELLA.

turrita, Gude.

EULOTA.

(Plectotropis.)

lepidophora, Gude.var. *tenuis*, Gude.*scepasma*, Pfr.

(Ægista.)

oculus, Pfr.

(Euhadra.)

Largillierti, Phil.var. *immaculata*, A. & R.var. *eucosmia*, Pils.var. *zacosmia*, Pils.

ADDITIONS TO BIBLIOGRAPHY.

JAPAN.

1900.—Pilsbry, H. A.: Additions to the Japanese Land Snail Fauna :
Proc. Acad. Nat. Sci. Philad., 1899, p. 525.

1900.—Pilsbry, H. A.: Notices of some new Japanese Mollusks :
Nautilus, xiv, p. 11.

CORRIGENDA.

In my classified list (ante, p. 19) *Plectotropis Ningpoensis*, Bttgr., should be deleted, since it is a Chinese shell. Mr. Pilsbry informs me that *Trochomorpha Fritzei*, Bttgr., referred by me to *Plectotropis* (ante, p. 20), is a true *Trochomorpha*.

EXPLANATION OF PLATE VIII.

FIGS.	1, 2.	<i>Ganesella turrita</i> , n.sp.
"	3-5.	<i>Eulota lepidophora</i> , n.sp.
"	6-8.	" <i>horrida</i> , Pilsbry.
"	9-11.	" <i>æmula</i> , n.sp.
"	12-14.	" <i>sericea</i> , n.sp.
"	15-17.	" <i>scepasma</i> , Pfr.
"	18-20.	<i>Chloritis fragilis</i> , n.sp.
"	21-23.	<i>Arnouldia Nahaënsis</i> , n.sp.
"	24-26.	<i>Macrochlamys fulgens</i> , n.sp.